

IN THE CLAIMS

Please amend claims 1-32 as indicated below.

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently Amended) A computer implemented method comprising:
receiving a search request at a server from a client over a network, the search request
including one or more search terms;
~~converting for each a search term in thea search request, the server identifying all~~
diphthongs within each search term to one or more canonical phonetic forms
~~based on similar pronunciation of the search term;~~
the server determining one or more canonical representations for each diphthong based
on pronunciation of each diphthong, the one or more canonical representations
being in text formats;
the server generating one or more canonical phonetic forms for each search term based
on possible spellings of the one or more canonical representations of each
diphthong, including
determining whether any canonical representations exist for one or more letters
of each search term, and
including in the one or more canonical phonetic forms of any canonical
representations exist for one or more letters of each search term;
the server performing a phonetic keyword search in a database coupled to the server
for each canonical phonetic form of the search term, wherein the canonical

phonetic search is performed based on the canonical phonetic forms generated from the canonical representation of both letters and diphthongs of the search request; and
the server generating an indication of search results based, at least in part, on the phonetic keyword search.

2. (Currently Amended) The method of claim 1, further comprising performing an initial search in the database based on each search term of the search request, wherein identifying all diphthongs, determining one or more canonical representations, generating one or more canonical phonetic forms, and performing a phonetic keyword search are performed when the initial search fails to produce a proper result. wherein converting the search term to one or more canonical phonetic forms comprises:

~~identifying one or more diphthongs within the search term;~~
~~determining one or more canonical representations for at least one of the one or more diphthongs based on pronunciation of the respective diphthong; and~~
~~generating one or more canonical phonetic forms of the search term based, at least in part, on possible spellings of the one or more canonical representations of the at least one diphthong.~~

3. (Currently Amended) The method of claim 2, wherein each canonical phonetic form is limited up to six characters further comprising:

~~determining whether any canonical representations exist for one or more letters within the search term; and~~

~~including in the one or more canonical phonetic forms of the search term any canonical representation for the one or more letters, wherein the canonical phonetic search is performed based on the canonical phonetic forms generated from the canonical representation of both letters and diphthongs of the search request.~~

4. (Currently Amended) The method of claim 1, wherein performing a phonetic keyword search comprises:

identifying one or more keywords the canonical phonetic forms of the search term;

and

searching the canonical phonetic forms of the one or more keywords for ~~one or more of~~ the canonical phonetic forms of the search term.

5. (Currently Amended) The method of claim 1, ~~wherein converting the search term to one or more canonical phonetic forms comprises~~ further comprising:

determining the possible pronunciation for each vowel contained within the search request in consideration of letters before and after the respective vowel;

generating one or more canonical representations for each of the possible pronunciation of each vowel, wherein the one or more canonical representations ~~does~~ do not contain the respective vowel itself; and

generating the one or more canonical phonetic forms based on possible spellings of the one or more canonical representations of the respective vowel.

6. (Currently Amended) The method of claim 4, further comprising:

prior to receiving the search request, generating canonical phonetic forms of the for a plurality of predetermined keywords including the one or more keywords of the canonical phonetic forms of the search term; and

storing the canonical phonetic forms of the predetermined keywords in a the database prior to receiving the search request.

7. (Currently Amended) The method of claim 6, wherein generating the canonical phonetic forms of the keywords comprises:

identifying one or more diphthongs within a each predetermined keyword;

determining one or more canonical representations for at least one of the one or more

diphthongs within each predetermined ~~the~~ keyword;

determining whether any canonical representations exist for one or more letters within

each predetermined ~~the~~ keyword; and

generating one or more canonical phonetic forms of each predetermined ~~the~~ keywords

from the canonical representations of the at least one diphthong within the

keyword and any canonical representation of the one or more letters within the

keyword.

8. (Currently Amended) The method of claim 3, further comprising ignoring any letter that is not a letter and ignoring a second consecutive appearance of ~~a back-to-back~~ an identical letter when determining the canonical representation of the respective letter of the search term.

9. (Currently Amended) A machine-readable medium having stored thereon sequences of instructions that, when executed, cause one or more electronic systems to:

receive a search request at a server from a client over a network, the search request including one or more search terms;

~~convert~~ for each search terms in a the search request, identify all diphthongs within each search term to one or more canonical phonetic forms based on similar pronunciation of the search term;

determine one or more canonical representations for each diphthong based on pronunciation of each diphthong, the one or more canonical representations being in text formats;

generate one or more canonical phonetic forms for each search term based on possible spellings of the one or more canonical representations of each diphthong, including determining whether any canonical representations exist for one or more letters of each search term, and

including in the one or more canonical phonetic forms of any canonical representations exist for one or more letters of each search term;

perform a phonetic keyword search in a database for each canonical phonetic form of the search term, wherein the canonical phonetic search is performed based on the canonical phonetic forms generated from the canonical representation of both letters and diphthongs of the search request; and

generate an indication of search results based, at least in part, on the phonetic keyword search.

10. (Currently Amended) The machine-readable medium of claim 9, wherein the sequences of instructions that cause the one or more electronic systems to perform an initial search in the database based on each search term of the search request, wherein identifying all diphthongs, determining one or more canonical representations, generating one or more canonical phonetic forms, and performing a phonetic keyword search are performed when the initial search fails to produce a proper result~~convert the search term to one or more canonical phonetic forms comprise sequences of instructions that, when executed, cause the one or more electronic systems to:~~

~~identify one or more diphthongs within the search term;~~
~~determine one or more canonical representations for at least one of the one or more diphthongs based on pronunciation of the respective diphthong; and~~
~~generate one or more canonical phonetic forms of the search term based, at least in part, on possible spellings of the canonical representations of the at least one diphthong.~~

11. (Currently Amended) The machine-readable medium of claim 10, wherein each canonical phonetic form is limited up to six characters~~further comprising sequences of instructions that, when executed, cause the one or more electronic systems to:~~

~~determine whether any canonical representations exist for one or more letters within the search term; and~~
~~include in the one or more canonical phonetic forms of the search term any canonical representation for the one or more letters, wherein the canonical phonetic search is performed based on the canonical phonetic forms generated from the canonical representation of both letters and diphthongs of the search request.~~

12. (Currently Amended) The machine-readable medium of claim 9, wherein the sequences of instructions that cause the one or more electronic systems to perform a phonetic keyword search comprise sequences of instructions that, when executed, cause the one or more electronic systems to:

identify one or more keywords the canonical phonetic forms of the search term; and
search canonical phonetic forms of keywords for one or more of the canonical
phonetic forms of the search term.

13. (Currently Amended) The machine-readable medium of claim 9, wherein the sequences of instructions ~~that cause the one or more electronic systems to convert the search term to one or more canonical phonetic forms~~ comprise sequences of instructions that, when executed, further cause the one or more electronic systems to:

determine the possible pronunciation for each vowel contained within the search request in consideration of letters before and after the respective vowel;

generate one or more canonical representation for each of the possible pronunciation of each vowel, wherein the one or more canonical representations does do not contain the respective vowel itself; and

generate the one or more canonical phonetic forms based on possible spellings of the one or more canonical representations of the respective vowel.

14. (Currently Amended) The machine-readable medium of claim 12, further comprising sequences of instructions that, when executed, cause the one or more electronic systems to

prior to receiving the search request, generate canonical phonetic forms of the~~for a~~
plurality of predetermined keywords including the one or more keywords of the canonical
phonetic forms of the search term, and

store the canonical phonetic forms of the predetermined keywords in a database prior
to receiving the search request.

15. (Currently Amended) The machine-readable medium of claim 14, wherein the
sequences of instructions that cause the one or more electronic systems to generate canonical
phonetic forms of the keywords comprise sequences of instructions that, when executed,
cause the one or more electronic systems to:

identify one or more diphthongs within each predetermined~~a~~ keyword;

determine one or more canonical representations for at least one of the one or more

diphthongs within each predetermined ~~the~~ keyword;

determine whether any canonical representations exist for one or more letters within

each predetermined ~~the~~ keyword; and

generate one or more canonical phonetic forms of each predetermined ~~the~~ keywords

from the canonical representations of the at least one diphthong within the

keyword and any canonical representation of the one or more letters within the

keyword.

16. (Currently Amended) The machine-readable medium of claim 11, wherein the
sequences of instructions further cause the system to ignore any letter that is not a letter and
ignore a second consecutive appearance of a ~~back-to-back~~ an identical letter when determining
the canonical representation of the respective letter of the search term.

17. (Currently Amended) An apparatus comprising:

a processor; and

a memory coupled to the processor, the memory having stored thereon sequences of instructions that, when executed, cause one or more electronic systems to

receive a search request at a server from a client over a network, the search request including one or more search terms,

~~convert for each a search term in a the search request, identify all diphthongs within each search term to one or more canonical phonetic forms based on similar pronunciation of the search term,~~

determine one or more canonical representations for each diphthong based on pronunciation of each diphthong, the one or more canonical representations being in text formats,

generate one or more canonical phonetic forms for each search term based on possible spellings of the one or more canonical representations of each diphthong, including

determining whether any canonical representations exist for one or more letters of each search term, and

including in the one or more canonical phonetic forms of any canonical representations exist for one or more letters of each search term,

perform a phonetic keyword search in a database for each canonical phonetic form of the search term, wherein the canonical phonetic search is performed based on the canonical phonetic forms generated from the canonical representation of both letters and diphthongs of the search request, and

generate an indication of search results based, ~~at least in part,~~ on the phonetic keyword search.

18. (Currently Amended) The apparatus of claim 17, wherein the sequences of instructions that cause the one or more electronic systems to perform an initial search in the database based on each search term of the search request, wherein identifying all diphthongs, determining one or more canonical representations, generating one or more canonical phonetic forms, and performing a phonetic keyword search are performed when the initial search fails to produce a proper result ~~convert the search term to one or more canonical phonetic forms comprise sequences of instructions that, when executed, cause the one or more electronic systems to~~

~~identify one or more diphthongs within the search term based on pronunciation of the respective diphthong,~~

~~determine one or more canonical representations for at least one of the one or more diphthongs, and~~

~~generate one or more canonical phonetic forms of the search term based, at least in part, on possible spellings of the canonical representations of the at least one diphthong.~~

19. (Currently Amended) The apparatus of claim 18, wherein each canonical phonetic form is limited up to six characters ~~further comprising sequences of instructions that, when executed, cause the one or more electronic systems to~~

~~determine whether any canonical representations exist for one or more letters within the search term, and~~

~~include in the canonical phonetic forms of the search term any canonical representation for the one or more letters, wherein the canonical phonetic search is performed based on the canonical phonetic forms generated from the canonical representation of both letters and diphthongs of the search request.~~

20. (Currently Amended) The apparatus of claim 17, wherein the sequences of instructions that cause the one or more electronic systems to perform a phonetic keyword search comprise sequences of instructions that, when executed, cause the one or more electronic systems to:

identify one or more keywords the canonical phonetic forms of the search term; and
search the canonical phonetic forms of keywords for one or more of the canonical phonetic forms of the search term.

21. (Currently Amended) The apparatus of claim 17, wherein the sequences of instructions ~~that cause the one or more electronic systems to convert the search term to one or more canonical phonetic forms~~ comprise sequences of instructions that, when executed, further cause the one or more electronic systems to:

determine the possible pronunciation for each vowel contained within the search request in consideration of letters before and after the respective vowel;

generate one or more canonical representation for each of the possible pronunciation of each vowel, wherein the one or more canonical representations ~~does~~ do not contain the respective vowel itself; and

generate the one or more canonical phonetic forms based on possible spellings of the one or more canonical representations of the respective vowel.

22. (Currently Amended) The apparatus of claim 20, further comprising sequences of instructions that, when executed, cause the one or more electronic systems to

prior to receiving the search request, generate canonical phonetic forms of the for a plurality of keywords including the one or more keywords of the canonical phonetic forms of the search term, and

store the canonical phonetic forms of the predetermined keywords in a database prior to receiving the search request.

23. (Currently Amended) The apparatus of claim 22, wherein the sequences of instructions that cause the one or more electronic systems to generate canonical phonetic forms of the keywords comprise sequences of instructions that, when executed, cause the one or more electronic systems to

identify one or more diphthongs within each predetermined keyword,

determine one or more canonical representations for at least one of the one or more

diphthongs within each predetermined keyword,

determine whether any canonical representations exist for one or more letters within

each predetermined keyword, and

generate one or more canonical phonetic forms of the keywords from the canonical

representations of the at least one diphthong within the keyword and any

canonical representation of the one or more letters within each

predetermined keyword.

24. (Currently Amended) The apparatus of claim 19, wherein the sequences of instructions further cause the system to ignore any letter that is not a letter and ignore a second consecutive appearance of a back-to-back an identical letter when determining the canonical representation of the respective letter of the search term.

25. (Currently Amended) A computer data signal embodied in a data communications medium shared among a plurality of network devices comprising sequences of instructions that, when executed, cause one or more electronic systems to:

receive a search request at a server from a client over a network, the search request including one or more search terms;

for each ~~convert~~ a search term in a ~~the~~ search request, identify all diphthongs within each search term to one or more canonical phonetic forms based on similar pronunciation of the search term;

determine one or more canonical representations for each diphthong based on pronunciation of each diphthong, the one or more canonical representations being in text formats;

generate one or more canonical phonetic forms for each search term based on possible spellings of the one or more canonical representations of each diphthong, including

determining whether any canonical representations exist for one or more letters of each search term, and

including in the one or more canonical phonetic forms of any canonical representations exist for one or more letters of each search term;

perform a phonetic keyword search in a database for each canonical phonetic form of

the search term, wherein the canonical phonetic search is performed based on the canonical phonetic forms generated from the canonical representation of both letters and diphthongs of the search request; and
generate an indication of search results based, ~~at least in part,~~ on the phonetic keyword search.

26. (Currently Amended) The computer data signal of claim 25, wherein the sequences of instructions that cause the one or more electronic systems to perform an initial search in the database based on each search term of the search request, wherein identifying all diphthongs, determining one or more canonical representations, generating one or more canonical phonetic forms, and performing a phonetic keyword search are performed when the initial search fails to produce a proper result~~convert the search term to one or more canonical phonetic forms comprise sequences of instructions that, when executed, cause the one or more electronic systems to:~~

~~identify one or more diphthongs within the search term based on pronunciation of the respective diphthong;~~
~~determine one or more canonical representations for at least one of the one or more diphthongs; and~~
~~generate one or more canonical phonetic forms of the search term based, at least in part, on possible spellings of the canonical representations of the at least one diphthong.~~

27. (Currently Amended) The computer data signal of claim 26, wherein each canonical phonetic form is limited up to six characters~~further comprising sequences of instructions that, when executed, cause the one or more electronic systems to:~~

~~determine whether any canonical representations exist for one or more letters within the search term; and~~

~~include in the one or more canonical phonetic forms of the search term any canonical representation for the one or more letters, wherein the canonical phonetic search is performed based on the canonical phonetic forms generated from the canonical representation of both letters and diphthongs of the search request.~~

28. (Currently Amended) The computer data signal of claim 25, wherein the sequences of instructions that cause the one or more electronic systems to perform a phonetic keyword search comprise sequences of instructions that, when executed, cause the one or more electronic systems to:

identify one or more keywords the canonical phonetic forms of the search term; and
search canonical phonetic forms of keywords for one or more of the canonical phonetic forms of the search term.

29. (Currently Amended) The computer data signal of claim 25, wherein the sequences of instructions ~~that cause the one or more electronic systems to convert the search term to one or more canonical phonetic forms~~ comprise sequences of instructions that, when executed, further cause the one or more electronic systems to:

determine the possible pronunciation for each vowel contained within the search request in consideration of letters before and after the respective vowel;

generate one or more canonical representation for each of the possible pronunciation of each vowel, wherein the one or more canonical representations ~~does~~do not contain the respective vowel itself; and

generate the one or more canonical phonetic forms based on possible spellings of the one or more canonical representations of the respective vowel.

30. (Currently Amended) The computer data signal of claim 28, further comprising sequences of instructions that, when executed, cause the one or more electronic systems to

g prior to receiving the search request, enerate canonical phonetic forms for a plurality of predetermined ~~of~~ keywords including the one or more keywords of the canonical phonetic forms of the search term, and

store the canonical phonetic forms of the predetermined keywords in a database prior to receiving the search request.

31. (Currently Amended) The computer data signal of claim 30, wherein the sequences of instructions that cause the one or more electronic systems to generate the canonical phonetic forms of keywords comprise sequences of instructions that, when executed, cause the one or more electronic systems to:

identify one or more diphthongs within each predetermined~~a~~ keyword;

determine one or more canonical representations for at least one of the one or more

diphthongs within each predetermined~~the~~ keyword;

determine whether any canonical representations exist for one or more letters within

each predetermined~~the~~ keyword; and

generate one or more canonical phonetic forms of the keywords from the canonical representations of the at least one diphthong within the keyword and any canonical representation of the one or more letters within each predetermined the keyword.

32. (Currently Amended) The computer data signal of claim 27, wherein the sequences of instructions further cause the system to ignore any letter that is not a letter and ignore a second consecutive appearance of a ~~back-to-back~~ an identical letter when determining the canonical representation of the respective letter of the search term.